

**[4910-13]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**Proposed Advisory Circular (AC) No. 21.101-XX, Advisory Material for the  
Establishment of the Certification Basis of Changed Aeronautical Products**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of availability and request for comments.

**SUMMARY:** This notice announces the availability of and request for comments on a proposed advisory circular (AC) that provides guidance for establishing the certification basis for changed aeronautical products, including identifying the conditions under which it will be necessary to apply for a new type certificate. The FAA has issued a final rule, Type Certification Procedures for Changed Products that amends the procedural regulations for the certification of changes to type certification products. These amendments affect changes accomplished through either an amended type certificate or a supplemental type certificate. This proposed AC provides guidance for determining compliance with those amended procedural regulations for the certification of changes to transport category airplanes and restricted category airplanes that have been certified using transport category regulations.

**DATES:** Comments must be received on or before November 20, 2000.

**ADDRESSEES:** Send all comments on the proposed AC to: Certification Procedures Branch, AIR-110, Aircraft Engineering Division, Aircraft Certification Service, Federal Aviation Administration, 800 Independence Ave. SW, Washington, DC 20591; telephone number: (202) 267-3777.

**FOR FURTHER INFORMATION CONTACT:** Madeleine Miguel, Certification Procedures Branch, AIR-110, Aircraft Engineering Division, Aircraft Certification Service, Federal Aviation Administration, 800 Independence Ave., Washington, DC 20591; telephone number: (202) 267-3777, fax (202) 267-5340.

## **SUPPLEMENTARY INFORMATION**

### **Comments Invited**

A copy of the draft AC may be obtained by accessing the FAA's webpage at <http://www.faa.gov/avr/arm/nprm/nprm.htm>. Interested parties are invited to comment on the proposed AC, and to submit such written data, views, or arguments as they desire. Commenters must identify AC 21-101-XX, Advisory Material for the Establishment of the Certification Basis of Changed Aeronautical Products, and submit comments to the address specified above. All communications received on or before the closing date for comments will be considered by the FAA before issuing the final AC.

### **Background**

#### Final Rule

The FAA amended and published in the Federal Register on June 7, 2000 (65 FR 36244) new procedural regulations, titled "Type Certification Procedures for Changed Products" for the certification of changes to type certification products. This final rule was in response to a trend in the aviation industry towards fewer aviation type certification products that are of completely new design and more products with multiple changes to previously approved designs. The final rule set mandatory compliance dates of December 10, 2001, for transport category airplanes and restricted category airplanes

that have been certified using transport category standards, and December 9, 2002, for all other category aircraft and engines and propellers.

The amended procedural regulations require that the starting point for determining the certification basis for an amended or supplemental type certificate be the regulations in effect at the date of the application for the change, rather than those regulations incorporated by reference in the type certificate. Exceptions are provided to permit the applicant, under certain conditions, to comply with previous amendments to those regulations.

#### Advisory Circular (AC)

This AC provides guidance for the applicant to comply with the amended regulations for the certification of changes to transport category airplanes and restricted category airplanes that have been certified using transport category regulations. Further guidance material related to other aeronautical products will be introduced and published as changes to the AC before the mandatory compliance dates for the amended procedural regulations become effective for those products.

On May 2, 1997, the FAA published in the Federal Register (62 FR 24152) a notice of availability and request for comments for a previous version of this proposed AC. The FAA determined that a new proposed AC is warranted due to the introduction of substantial changes, particularly to Appendix 2 of the AC. Appendix 2 of the 1997 proposed AC contained a “safety benefit-resource evaluation guide,” recommended by the Aviation Rulemaking Advisory Committee (ARAC), as a means of compliance to the proposed rulemaking § 21.101(b)(3), Determining Whether Compliance Would Not Materially Contribute to the Level of Safety of the Changed Product or Would Be

Impractical. The FAA declined to include this safety benefit-resource evaluation guide in this new proposed AC. Instead, the FAA has included "Procedure for Evaluating Impracticality of Applying Latest Regulations to a Changed Product," as guidance material that can be used for evaluating the safety benefit and resource impact of implementing the latest airworthiness requirements in the certification basis of a changed product. This procedure is more generic in nature. It describes the steps and necessary inputs that any applicant can use on any project to develop a position or argument to show that compliance with a regulation in effect at the date of the application for the change would be impractical.

Issued in Washington, DC, on August 15, 2000.

/S/

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